

HAB response letter to the 100-F ROD

The Board has received and is disappointed by the response from the Tri-Party Agencies provided to HAB Advice 280 on the 100-F RI/FS, and Proposed Plan. The response comments the Tri-Party Agencies provided show that none of the advice provided by the Board was accepted in the formulation of the record of decision (ROD) and remedial approach. The Board takes this opportunity to advise the Tri-Parties on a policy level about the Board's view on remediation approach policy.

Because of this Tri-Party response to HAB advice in this the first of the (final) RODs to be issued for the River Corridor Areas, the Hanford Advisory Board reiterates HAB values in the hope that future decisions will embrace these concepts in their design.

Lesson learned from the 100-F ROD:

1. The Board has a strong preference for R-T-D. The Board advises the Tri-Parties that, for example in the 100-F ROD, removal of the contaminant mass at 118-F-8:3 would have significantly reduced the need for long ICs and would have left the 100-F site with a considerably reduced toxicity. In general, the Board recommends that the Tri-Parties opt in situations like this to use R-T-D, rather than use very long term MNA.
2. ICs to be maintained over very long periods to reach cleanup goals are not a reasonable choice for remediation. The Board recommends that a maximum time threshold should be established for Institutional Controls. The Board advises the Tri-Parties that ICs over a 100 Years maximum period are not reasonable.
3. The Five-Year Reviews HAB has seen in the near past have been unconvincing in their ability to determine whether a remedy was working or not. In fact the statement provided to the HAB was that "we checked and we did do the remediation we said we would," and not whether it was effective. The Board recommends that the Tri-Parties provide more detailed information in the future five year reviews to better demonstrate that the remedies continue to work as predicted and continue to be protective.
4. Higher Level contamination left at near surface, but below 15-foot depth, that demands a long period of ICs, must be reconsidered as being safe and protective. The Board recommends that the Tri-Party Agencies need to reconsider the relative value of removing contaminants (to reduce toxicity) when evaluating the balancing criteria for the Proposed Plan alternatives.
5. The Board advises that should include discussion of the indicators of failures of MNA in future RI/FS and Proposed Plan and other documentation, and define the

contaminant level triggers that would require more detailed evaluation during the CERCLA five-year reviews.

6. With a need for ICs to be maintained for very long time periods, the consequences of catastrophic events with longer periodicity (for example, the 500-year flood, the probable maximum flood, and catastrophic failure of the Grand Coulee dam) become important to the durability of the remediation techniques selected, and should be included in the remediation alternative consideration.

Addendum 1. Some of the HAB Values

Protect the broader environment – do no harm during cleanup or with new development

- ***Cleanup activities should protect the integrity of all biological resources, with specific attention to rare, threatened, and endangered species and their related habitat.***

Board has a Strong Preference for R-T-D

- *While the Board recognizes that waste will be left in place at Hanford, the board's strong preference is for remove-treat-dispose (RTD) rather than leaving waste in place.*

(1). Hanford waste that remains on site must be left in a facility or configuration that will be protective of human health and the environment.

HAB Advice 280, Point 4 says, “The Board advises that the RI/FS and Proposed Plan and future documentation should discuss the indicators of failures of MNA, and define the triggers that would require future detailed evaluation during the CERCLA five-year reviews. Especially with a need for ICs to be maintained for 264 years, the consequences of events (e.g., the 500-year flood, probable maximum flood, and catastrophic failure of the Grand Coulee dam) should also be considered.”

(2). Natural attenuation as a remedy is not appropriate unless existing remedies are not technically practicable and relevant health and environmental standards can be achieved in a reasonable time frame.

HAB Advice 280, Point 3 says, “The Board advises the TPA agencies to perform additional RTD at waste site 118-F-8:3 to reduce the lengthy duration of ICs at 100-F.” The Board felt that the projected 264 year waiting period for the deep soil site to reach a contaminant level that would be safe for human health and the environment. The likelihood of some event disturbing this relatively near surface contamination grows with time and historical events, and the safe configuration at that length of time is not guaranteed.

(3). Institutional controls should not be a substitute for cleanup.

Technology Development is necessary, but should not impede cleanup now.

- DOE should move forward with cleanup using the most practicable, timely, available technology, while leaving room for future innovation.

- DOE should dedicate funds to explore needed new technologies, but not delay necessary cleanup in anticipation of future development of a “magic bullet.”